

### **Heat Enforcement**

#### ENERGY STAR Specification:

- The maximum operating case temperature of the ballast when installed in the fixture is not to exceed the ballast manufacture recommended operating temperature.
- Always a technical requirement but a test report did not need to be submitted to EPA.
- In 2003 EPA evaluated the maximum operating case temperature of "high risk" fixtures
  - 380 fixtures targeted (25 manufacturers)
  - 336 passed
  - 44 voluntarily delisted or did not pass



#### **Color Variance**

- Based on final research findings and industry feedback an acceptable range of chromaticity coordinates may be adopted for future ENERGY STAR RLF Eligibility Criteria (aka specification).
- Laboratory documentation of chromaticity measurement results will most likely be required if a "color" requirement is adopted.



#### Pin Base Standardization

- ENERGY STAR requires that fixtures be able to accept lamps with ANSI standardized bases.
  - i.e. no proprietary lamp bases.
- EPA working with ALA and NEMA to investigate Line-Voltage Socket Standardization
  - NEMA/ALA held first industry workgroup meeting on January 28, 2004
  - Additional meeting to be held in conjunction with the Dallas International Lighting Market – June 28



#### **Modular Ballasts**

- EPA currently promoting the use of replaceable ballasts
- Benefits:
  - Consumer friendly
  - Builder/Contractor friendly



# Electronic vs Magnetic Ballasts



- Current specification (V3.2) states that eventually ALL ENERGY STAR fixtures will require electronic ballasts.
- Currently only linear lamp ballasts must be electronic.
- Time is right for this change:
  - Electronic ballast advancements
  - Readily available electronic ballasts
  - Routinely asked for by retailers and utilities
  - Supported by several manufacturers



#### **End of Life Protection**

- Current Specification:
  - Required for all T5 and smaller lamps. Manufacturers must submit laboratory data or an engineering description outlining the scheme that is used to achieve the end of life function within the ballast.
- IEC Standard for end of life testing methodology is in final draft review.
  - EPA may require all systems using T5 and smaller diameter lamps be tested according to the IEC standard, and laboratory documentation submitted to EPA.

## **Photocell Controlled Circuits**



- Outdoor models sold without individual photocells must include specific package language:
  - "This product is ENERGY STAR qualified only when installed on a photocell controlled circuit."
- This is only intended for fixtures sold to multi-tenant housing (apartments and condos).



### **Two-Wire Dimmability**

- GOAL:
  - ENERGY STAR fixtures can be dimmed by a standard two wire wall dimmer.
- Routinely asked for by builders
- Contractor friendly
- Consumer expectations

